

WHAT IS CLAIMED IS:

1. (Amended) A burner for the production of a hot gas, comprising:
a burner outlet having an outlet edge and opening into a combustion chamber downstream of the outlet edge;
a fuel-air mixture flowing out from the burner outlet forms an outflow boundary layer at the burner outlet and forms a flame after the ignition of the burner; and
a structural element is arranged at the burner outlet that changes the thickness of the outflow boundary layer that would otherwise occur without the structural element, the resulting change in thickness of the outflow boundary layer preventing periodic releases of heat and thermoacoustic oscillations in the combustion chamber.
2. (Amended) The burner according to claim 1, wherein the structural element includes a shear layer fence that runs along the outlet edge of the burner outlet and projects into the combustion chamber with the height of the shear layer fence being substantially parallel to the flow direction.
3. (Amended) The burner according to claim 2, wherein the height of the shear layer fence is approximately 5 mm.
4. (Amended) The burner according to one of claims 1-3, wherein the burner is a double cone burner and includes at least two hollow, conical partial members that are mutually offset in a midplane, such that adjacent walls of the partial members form tangential air inlet channels for the inflow of combustion air into an internal space bounded by the partial members, with the edges of the partial members facing toward the combustion chamber forming the outlet edges of the burner outlet.